

## Running out of water

that could have enormous implications for local farmers. They're running out of water.

Not that some of those Plains states were exactly the Garden of Eden in the first place, but a substantial share of our feed grain is produced in states where adequate rainfall is always a problem. And now the whole concept of irrigation may be in trouble.

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A study done at the Center for Agricultural and Rural Development at Iowa State University indicates that an area stretching from the Nebraska, South Dakota border down into the Texas Panhandle is using up ground water much faster than it's

Something is happening out West being replaced. And the Center is predicting that by 1990 this shortage of ground water will cause that region's farm production to decline by 970 million dollars.

The area, known as the Ogallala Aquifer region, is already facing a crisis with some counties drawing water from the ground at a rate 10times faster than it is being replenished. The problem is compounded by the fact that as the water table drops, it costs more to pump water for irrigation, and that makes it even less profitable for farmers.

As a result of the decline in available ground water in that region, the study points out that there will be a dramatic decline in irrigated land. That means a

return to the much less productive dry land farming common before the widespread use of irrigation.

The problem in the Ogallala Aquifer may be more pronounced and the impact more dramatic than in some other places. But it points to what a lot of experts have been saying all along - that far-mers are drawing more water out of the ground than nature is putting back - and that a day of reckoning is at hand. We can't just keep going deeper into the ground to find a declining water supply.

While this may work for a while, eventually it becomes economically impossible. It just costs too much to drill the wells and pump the water. Farmers in those situations would be unable to compete with farmers in areas of more plentitul rainfall, or where irrigation water is more readily available.

It stands to reason that some of the semi-arid parts of this country are that way for a reason. They just don't get enough rain. Modern agriculture's efforts to modify that situation by drilling wells and pumping water to the crops is at best a short run solution because it relies on reserves stored over the centuries - reserves that aren't being replenished at nearly the rate of use.

Obviously, if those dry areas were getting the rainfall they needed irrigation wouldn't be necessary and they wouldn't be dry areas. But they are, and farmers have tried to cultivate them anyway, and in the long-run

natural scheme of things that just

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won't work. So it looks as though some of those irrigated oases of the Great Western Plains states are going to be drying up, perhaps even sooner than some experts were predic-

ting. And that's where the im-

plications lie for local farmers. Those farmers with plenty of water, at least for the short run, or with moisture-retaining soils that will produce an adequate crop year in and year out, have a considerable advantage. Combine that with the fact that local farmers are within easy shipping distance of half of the nation's population, and it becomes apparent that locally produced farm commodities are going to continue to enjoy strong demand.

Of course these are long-range situations. Kansas isn't going to dry up overnight and the

Delmarva peninsula won't be a breadbasket for the East in the next few years. But the trends seem to be pointing in that direction.

There are good logical reasons why some of the Western states will return to more dry land farming while some other areas of the country, including the Delmarva peninsula, step up their production of both food and feed crops.

It's a matter of comparative advantage. If we have the water and the other factors of production and we're closer to the markets and to the people who need food, then it makes sense that we're going to be strong in the farming business for a long time. Therein lies a serious challenge to farmers, politicians, land use planners and others who have a stake in the long-range health and well being of agriculture.

## **MAES** researcher to present papers at engineer's meeting

COLLEGE PARK, Md. - A research engineer for the Maryland Agricultural Experiment Station will be one of several key speakers at the American Society of Agricultural Engineers' winter meeting in Chicago Dec. 15-18.

Lewis E. Carr, a University of Maryland instructor and extension specialist with nine years'

research experience at MAES's broiler research substation near Salisbury, will chair one segment of the ASAE meeting and present scientific papers for two others.

One of Carr's papers, "Water and Feed Requirements for Broilers," offers research results of his work with feed and water equipment in the Delmarva broiler industry and how it affects broiler nutritional requirements at difterent stages of the broiler's maturity.

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